Remarks

The above amendments to the specification update the status of two US patent applications that have issued and corrects a typographical error, and thus do not add new matter. The claim amendments are supported in the specification as filed. The added language is underlined on the attached marked-up copy of the amendment. No new matter has been added.

Respectfully submitted,

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S/N To Be Assigned PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	THOMPSON	Examiner:	C. KOH
Serial No.:	To Be Assigned	Group Art Unit:	3738
Filed:	Herewith	Docket No.:	11576.38USC1
Title:	STENT WITH ENHANCED FRICTION		

MARKED-UP COPY OF AMENDMENTS

In the Specification

Please insert the following paragraph on page 1 after the title:

This invention is a continuation of U.S. patent application Serial No. 09/404, 418 filed September 23, 1999.

Please replace the paragraph on page 3, lines 16-26 (3rd paragraph) with the following replacement paragraph:

For purposes of illustration, the present invention is described with reference to a stent 10 having a structure such as more fully described in commonly assigned and copending U.S. patent application Ser. Nos. 09/049,486 filed March 27, 1998, now U.S. Pat. No. 6,132,460, and 09/069,347 filed April 29, 1998, now U.S. Pat. No. 6,132,461. Such a stent 10 is formed from a hollow, solid wall tube of stent material (e.g., titanium, Nitinol, stainless steel etc.). Excess material of the tube is removed through any suitable means such as laser cutting or chemical etching. Removal of the excess material leaves a stent 10 having a plurality of ribs 16 defining a plurality of open cells 18 extending through the wall thickness of the stent 10. The ribs 16 have interior surfaces 16a (Figs. 3 and 4) facing the axis X – X and exterior surfaces 16b facing away from the axis X – X. The interior and exterior surfaces 16a, 16b are joined by radial surfaces 16c.

Please replace the paragraph on page 5, lines 5-11 (2nd paragraph) with the following replacement paragraph:

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The present invention selectively roughens the interior surface 16a of the stent 10 to enhance friction between the stent 10 and a catheter balloon. Such a roughening is counter-intuitive since conventional stent construction theory calls for a smooth, highly polished stent to avoid or minimize raised areas which might otherwise provide sites for thrombus formation or platelet activation after the stent is deployed. However, test data have indicated that a stent 10 with roughened surfaces as will be described does not exhibit excessive thrombus formation or platelet activation.

In the Claims

Please amend claims 1-4 and 6, and add new claims 8-15 as follows:

1. An intraluminal stent comprising:

a [tube] stent body having an un-deployed [diameter] orientation in which the stent body is sized [for the tube] to be placed on a deployment balloon and advanced through a body lumen to a deployment site;

said [tube] stent body expandable upon inflation of said balloon to an enlarged [diameter] orientation sized for said [tube] stent body in said enlarged [diameter] orientation to be retained within said lumen at said site upon deflation and withdrawal of said balloon;

said [tube] stent body having a stent axis extending between first and second axial ends of said [tube] stent body;

said [tube] stent body having an exterior surface and an interior surface;

said interior surface including at least a portion having a rough surface finish rougher than a surface finish of said exterior surface.

2. A stent according to claim 1 wherein said portion includes first and second portions of said rough surface finish disposed on opposite sides of a center of said [tube] stent body.

3. A stent according to claim 2 wherein said first and second portions extend[s] along substantially an entire axial length of said [tube] stent body.

4. A method for fabricating a stent for placement in a body lumen, said method comprising:

forming a [tube] stent body having an un-deployed [diameter] orientation in which the stent body is sized [sized for the tube] to be placed on a deployment balloon and advanced through a body lumen to a deployment site, said [tube] stent body expandable upon inflation of said balloon to an enlarged [diameter] orientation sized for said [tube] stent body in said enlarged [diameter] orientation to be retained within said lumen at said site upon deflation and withdrawal of said balloon, said [tube] stent body having a stent axis extending between first and second axial ends of said [tube] stent body, said [tube] stent body having an exterior surface and an interior surface; and

polishing said [tube] stent body to polish said exterior surface to a smooth surface finish and with at least a portion of said interior surface having a rough surface finish rougher than said exterior surface finish.

6. A method according to claim 5 wherein said rough surface finish is applied at least on opposite sides of a center of said [tube] stent body.

8. (New) An intraluminal stent comprising:

a stent body having an un-deployed orientation in which the stent body is sized to be placed on a deployment balloon and advanced through a body lumen to a deployment site;

said stent body expandable upon inflation of said balloon to an enlarged orientation sized for said stent body in said enlarged orientation to be retained within said lumen at said site upon deflation and withdrawal of said balloon;

said stent body having a stent axis extending between first and second axial ends of said stent body;

said stent body having an exterior surface and an interior surface;

said interior surface including at least a portion having a rough surface finish.

9. (New) An intraluminal stent comprising:
a stent body having an un-deployed orientation in which the stent body is sized to be advanced through a body lumen to a deployment site;

said stent body expandable to an enlarged orientation sized to be retained within said lumen at said site;

said stent body having a stent axis extending between first and second axial ends of said stent body;

said stent body having an exterior surface and an interior surface;

said interior surface including at least a portion having a rough surface finish.

10. (New) A stent according to claim 9, wherein said rough surface finish is rougher than a surface finish of said exterior surface.

11. (New) A stent according to claim 9, wherein said portion includes first and second portions of said rough surface finish disposed on opposite sides of a center of said stent body.

12. (New) A stent according to claim 11 wherein said first and second portions extend along substantially an entire axial length of said stent body.

13. (New) A method for fabricating a stent for placement in a body lumen, said method

comprising:

forming a stent body having an un-deployed orientation in which the stent body is sized to be advanced through a body lumen to a deployment site, said stent body expandable to an enlarged orientation sized to be retained within said lumen at said site, said stent body having a stent axis extending between first and second axial ends of said stent body, said stent body having an exterior surface and an interior surface; and

roughening at least a portion of said interior surface such that the interior surface has a rough surface finish.

14. (New) A method according to claim 13 wherein said roughening step comprises directing a particulate stream at the interior of the stent body.

15. (New) A method according to claim 13 wherein said rough surface finish is rougher than a surface finish of said exterior surface.